

Lake Champlain Sea Grant

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From the Ground Up Webinar - June 11, 2014



Sea Grant Program Nationally

- Administered by NOAA
- Network of 33 programs in every coastal and great lakes state plus Lake Champlain, Guam, and Puerto Rico
- University-based network w/ over 300 institutions
- Address issues such as...
 - Coastal Hazards
 - Sustainable Coastal Development
 - Seafood Safety

Lake Champlain Sea Grant

- Cooperative program between UVM and SUNY Plattsburgh
- Focus on research, outreach and education
 - Fisheries, AIS
 - Aquatic Science Literacy (Watershed Alliance, 4H2O, Professional Groups)
 - Hazard Resiliency
 - Stormwater (GSI)



Current Stormwater Initiatives

- Training Courses
 - Sustainable Landscape Stewards
 - Water Resources for Realtors
- Let it Rain Stormwater Program
 - Connecting the Drops Outreach Campaign
- Research
 - Evaluating Flood Prediction Tools in two Lake Champlain sub watersheds
 - Bioretention on UVM Campus

Sustainable Landscape Stewards

- Training Course for Community Leaders
 - Municipal Board members, Watershed groups, town staff
- 36 hours of instructions
 - 3.6 CE Credits from UVM
- Classroom and field components
- Many community partners



Water Resources for Realtors

- Land Use Course for VT Licensed Realtors
- 2.5 hour workshop –
 - Eligible for 2 CE credits from VT state licensing board
- Offered across VT
- Covers State of the Lake, Rivers, Wetlands, GSI, & mapping to predict flood risk
- Partner: Lake Champlain Basin Program

Water Resources for Realtors A Quick Guide

With smart land use decisions, waterways can add value and beauty to a property. The resources provided on this card will help Real Estate Professionals get the information they need to protect their clients and their investments while responsibly caring for the health of our lakes, rivers, and wetlands.

VT State Regulations and Programs

VT Wetland Rules classify and protect wetlands within the state from infringement by development. Minimum buffer zones and detailed regulations can be found at: http://www.vtwaterquality.org/permits/html/pm_cud.htm

VT Shoreline Protection Bill was still being debated in the House of Representatives at printing (Feb 2014). If passed, this legislation will change land use standards on lakeshore development—in part establishing a 250 foot “lakeside zone” with associated land use rules. <http://www.leg.state.vt.us/docs/2014/bills/intro/H-223.pdf>

VT River Management Program employs river scientists and floodplain managers for the State.

Technical and regulatory assistance on fluvial erosion hazard areas, construction on or near a river, FEMA's flood insurance program, and conditions of any stream in Vermont can be gathered from this office. <http://www.amr.state.vt.us/doc/waterq/river.htm>



Land Management Resources and Reports

VT ANR's Natural Resources Atlas is a powerful mapping tool with a wide range of land use information embedded in an easy-to-use online format. Create your own maps with selected layers including mapped wetlands, floodways, underground storage tanks, soils, wells, and much more. Link to data including complete reports and permits. <http://anrmaps.vermont.gov/web/atlas/anra/>

State of the Lake Report provides up-to-date scientific information to citizens and resource managers about the Lake Champlain condition, threats to its health, and opportunities to meet challenges. <http://solc.bcp.org/>

VT Rain Garden Manual is a layman's guide describing how to design and build a residential rain garden to absorb and infiltrate stormwater. http://letitrainvt.org/wp-content/uploads/2013/01/VTRainGardenManual_Full.pdf



Land Management Resources and Reports (cont'd)

LID and GSI Info Sheet The VT Green Infrastructure Initiative released easy-to-read and up-to-date fact sheets related to Low Impact Development and Green Stormwater Infrastructure. http://www.vtwaterquality.org/stormwater/html/wi_gi_newandnoteworthy.htm

The Shoreline Stabilization Handbook provides tips to protect shoreline properties from erosion while being sensitive to surrounding investments and aquatic ecosystem health. <http://www.uvm.edu/seagrant/sites/uvm.edu/seagrant/files/shorelinestabilizationhandbook.pdf>

Living in Harmony with Streams is an informational booklet that covers river dynamics and science in an approachable format targeting riparian property owners. This is essential reading for any property owner on or near a stream. <http://www.winooskiwater.org/images/userfiles/files/Stream%20Guide%201-25-2012%20FINAL.pdf>

Cost Share & Property Certification Programs



Let It Rain is a program that offers financial and technical assistance to homeowners who choose to install green stormwater infrastructure on their properties. letitrainvt.org

BLUE is a certification program for residential properties who follow a list of watershed friendly practices. mychamplain.net/blue

VT Lake Wise Program, run by VT Department of Environmental Conservation, incentivizes lake-friendly shoreland property management, provides technical assistance, and certifies properties as “Lake Wise.” <http://www.watershedmanagement.vt.gov/lakew/htm>

Trees for Streams programs seek to improve stream health and reduce erosive power by restoring riparian buffer vegetation. Contact your local conservation district for information on your eligibility.

Contact Information

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www.lcbsp.org



Let it Rain

Stormwater Program

- Incentive Program for GSI Installations
- WNRCD and LCSG offer free site assessments and technical assistance to anyone in the Lake Champlain Basin
- Track practices based on impervious surface area mitigation

www.letitrainvt.org



Heather Bullet RG - Burlington



Connecting the Drops

- Art-based outreach campaign
- 2013 focused on Burlington with 19 rain barrels – funded by ECOS Project and RSEP
- 2014 exhibit is in Maple Street Park, Essex Junction – funded by RSEP
 - June 9 – July 16
- Sign up to Win a Rain Barrel and read the Kids VT Stormwater Story:
letitrainvt.org



Current Research

- Recent Grant Award from NOAA
 - Flood mitigation – analysis of current prediction tools in climate change scenarios in two LC subwatersheds
- Carol Adaire and Stephanie Hurley – Bioretention Research on UVM Campus
 - Evaluating water quality and green house gas emissions under different planting regimes, storm loading & soil treatments
 - <http://www.uvm.edu/~pss/?Page=bioretentionproject.html>



Questions

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Do you see a group in need of land use or water quality training? Let us know! We want to meet that need.